

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended): A multilayer thin film formed on a Si substrate by epitaxial growth, the multilayer thin film comprising:

a buffer layer formed on said Si substrate, where said buffer layer includes

an oxide thin film consisting of ZrO_2 ~~zirconium or of a rare earth element on said Si substrate~~; and

an electrically conductive thin film having (100) or (001) orientation directly on said oxide thin film,

a perovskite oxide thin film formed on said buffer layer, which is grown epitaxially with respect to said buffer layer, and

a ferroelectric thin film having (100) and (001) orientation, which has a different composition than said perovskite oxide thin film and which is epitaxially grown on said perovskite oxide thin film.

Claim 2 (Previously Presented): The multilayer thin film of claim 1, wherein said perovskite oxide thin film has insulating properties.

Claims 3-4 (Canceled)

Claim 5 (Previously Presented): The multilayer thin film of claim 1, wherein said ferroelectric thin film comprises PZT.

Claim 6 (Original): An electron device comprising a multilayer thin film as recited in claim 1.

Claim 7 (Currently Amended): A process for preparing the multilayer thin film of claim 1, comprising:

forming a buffer layer including an oxide thin film consisting of ZrO_2 zirconium or of a rare earth element on an Si (100) substrate,

forming an electrically conductive thin film having (100) or (001) orientation directly on said oxide thin film,

epitaxially growing a perovskite oxide thin film ~~having a (100) or (001) orientation~~ on said buffer layer, and

epitaxially growing a ferroelectric thin film having (100) or (001) orientation and having a different composition than said perovskite oxide thin film on said perovskite oxide thin film.

Claim 8 (Canceled)

Claim 9 (Previously Presented): The multilayer thin film of claim 1, wherein said buffer layer comprises Y_2O_3 .

Claim 10 (New): The multilayer thin film of claim 1, wherein said oxide thin film has (001) orientation and said conductive thin film has (100) orientation.